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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/605,884 | 06/29/2000 | Kazushi Honda | 193857US2 | 7308 |

22850 7590 08/26/2003

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| EXAMINER |
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GROSS, KENNETH A

| ART UNIT | PAPER NUMBER |
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2122

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/605,884

Applicant(s)

HONDA, KAZUSHI

Examiner

Kenneth A Gross

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed on June 16th, 2003.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 21-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, Claims 21-24 describe a second code optimizing processor for scanning the source programs, and generating an instance of the multiphase data type description in the body of the source programs only when the corresponding use flag is not set in a use status in the multiphase data type definition table. This concept is not supported in the specification. In fact, the specification supports that an instance of a member function is not generated if the member function is not used, which contradicts the claims (Page 25, lines 21-23).

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-18 and 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In regard to Claims 1, 9, 16, and 21-24, these claims recite,

“to delete, when a data type definition is already stored or the use flag is not set in a use status in the data type definition table, the data type definition from the source programs”. The term “the data type definition” is unclear and appears to lack antecedent basis. The term “a data type definition” seems to precede it, however, this data type definition exists on the data type definition table, and cannot be the same data type definition in the source program. Both definitions might define the same data type, however, they are still separate definitions. Furthermore, it is not clear how the code optimizing processor that scans the source programs operates *before* it deletes a data type definition. It needs to be clarified in Claim 1 how the processor exactly searches for data type definitions in the source programs and on the data type definition table, before describing how it operates on data type definitions. The term “the corresponding data type definition” in Claim 1 is unclear. Specifically, the Claim only makes reference to one “use flag” and a data type definition table configured to store “a data type definition”. Hence, if the table only stores one data type and one use flag, then the use flag will always correspond to the data type. Claims 2-7, 10-15, 17, and 18 are rejected for being dependent on a rejected parent claim.

Claims 5-7, 13-15, and 21-24 cite the term ‘multiphase’. The term ‘multiphase’ is not known outside the scope of this application. The term ‘multiphase data type’ can be interpreted to mean a data type or class that uses a template model, however, this needs to be explicitly stated in the claims. In regard to Claims 5 and 13, it is unclear what the term ‘is one of’ means in the scope of the claim. It is further unclear how a data type can simultaneously be a multiphase type, a multiphase type function, and a multiphase type holding member function. In regard to Claims 6 and 14, it is unclear what is means by ‘representing whether instantiation is requested

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in the source program for every symbol of each data type of the multiphase type.” This claim can be interpreted to refer to a constructor, as used in C++, for a template class, where the symbols are the values given to certain variables used by the constructor to create a new object of the template class.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 9, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nackman et al. (U.S. Patent Number 6,182,281) in view of Palay et al. (U.S. Patent Number 5,613,120) and further in view of Van Dyke et al. (U.S. Patent Number 5,175,856) and Chapman et al. (U.S. Patent Number 6,446,254).

In regard to Claim 1, (a) a preprocessor configured to execute preprocessing of source programs (Column 18, lines 44-50); (b) a language processor configured to compile the source programs (Column 18, lines 3-13). Nackman does not teach a data type definition table, nor does he teach a code optimizing processor for scanning the source code and deleting duplicate data type definitions. Palay, however, does teach a class definition table (Column 12, lines 15-17) and a linker that removes data type definitions from the object file when the definition is already stored in the class definition table (Column 28, lines 39-61). Neither Nackman nor Palay teach a use flag, which is set in use status when a data type definition is described in a body of any of all

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source programs to be linked to the one object program. Van Dyke, however, does teach a use flag that specifies when a data type has been explicitly declared (Column 25, Table VIII). Van Dyke does not teach a code optimizing processor that deletes a data type definition from a source program when the data type is not being used. Chapman, however, does teach removing unused classes from a source file (Column 4, lines 27-43). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to develop a system with a preprocessor and compiler as taught by Nackman, and include a data type definition table and a processor for removing duplicate data definitions from the code, as taught by Palay, since removing duplicate code reduces the size of the overall program and promotes better organization of the code, where the table includes a use flag, which is set in use status when a data type definition is described in a body of any of all source programs to be linked to the one object program, as taught by Van Dyke, where the a code optimizing processor deletes a data type definition from a source program when the data type is not being used, as taught by Chapman, since this allows a reduction of code size by removing unnecessary code. Claims 9, 16, and 19 correspond directly with Claim 1, and are rejected for the same reasons as Claim 1.

7. Claims 2, 3, 10, 11, 17, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nackman et al. (U.S. Patent Number 6,182,281) in view of Palay et al. (U.S. Patent Number 5,613,120) and further in view of Van Dyke et al. (U.S. Patent Number 5,175,856), Chapman et al. (U.S. Patent Number 6,446,254), and "Access 2000 for Windows for Dummies" by John Kaufeld, 1999 (hereinafter Kaufeld).

For specific rejections of Claims 2, 3, 10, 11, 17, 18, and 20, see the office action mailed on December 18th, 2002. (Note: these claims have been amended to correct certain 112 2nd paragraph rejections, and the scope of the claims have not changed).

8. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nackman et al. (U.S. Patent Number 6,182,281) in view of Palay et al. (U.S. Patent Number 5,613,120) and further in view of Van Dyke et al. (U.S. Patent Number 5,175,856), Chapman et al. (U.S. Patent Number 6,446,254), "Access 2000 for Windows for Dummies" by John Kaufeld, 1999 (hereinafter Kaufeld), and Bacon et al (U.S. Patent Number 6,041,179).

For specific rejections of Claims 4 and 12, see the office action mailed on December 18th, 2002. (Note: these claims have been amended to correct certain 112 2nd paragraph rejections, and the scope of the claims have not changed).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Gross whose telephone number is (703) 305-0542.

The examiner can normally be reached on Mon-Fri 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

KAG



TUAN Q. DAM
PRIMARY EXAMINER